

***REMARKS***

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated December 8, 2006. Reconsideration is respectfully requested.

**AMENDMENTS**

Claims 1, 3-7, 9-11, 13-19, 23, and 25-28 are pending in the application. Claims 1, 11, and 19 are presently amended. Claims 26-28 are added. The amendments and new claims find support throughout the specification as originally filed, for example, at page 6, line 16 through page 7, line 9, as well as in Table 1 on page 7. No new matter is entered into the application by the addition of the aforementioned amendments and claims.

**REJECTIONS UNDER § 112**

In the Office Action, claims 1, 3, 11, 19, 22, and 24 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement. It is believed that the currently amended claims 1, 11, and 19 fulfill the statutory requirements of 35 U.S.C. 112, and are now in a condition suitable for allowance. Reconsideration and allowance of claims 1, 11, and 19 is hereby respectfully requested.

Claims 22 and 24 are canceled without prejudice.

Claim 3 is alleged in the Office Action to contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 3 includes “wherein the thiadiazole is substituted with at least one linear, branched, or cyclic saturated or unsaturated hydrocarbon group.” The thiadiazole refers to the thiadiazole of claim 1, which may be a hydrocarbon-substituted thiadiazole as evidenced by the prefix *hydrocarbyl*-, readily recognizable to one skilled in the art. Furthermore, it is stated within the specification on page 3, lines 10-12 that the hydrocarbyl substituent group may be aliphatic or aromatic,

including cyclic, alicyclic, aralkyl, aryl, and alkaryl. On page 4, lines 10-15, branched chain hydrocarbyl substituents are mentioned, including hydrocarbyl groups derived from isopropyl mercaptans. In the same paragraph, examples of both saturated (isopropyl) and unsaturated (polyisobutylene) hydrocarbyl substituents are given.

It would be readily apparent to one of skill in the art that the prefix *hydrocarbyl-* used in claim 1 encompasses a large class of possible substituents, including the linear, branched or cyclic saturated or unsaturated hydrocarbons of claim 3. For the reasons set forth herein, reconsideration and allowance of claim 3 is hereby respectfully requested.

#### **REJECTIONS UNDER § 102**

In the Office Action, claims 1, 4, 5, 7, 9-11, 13, 14, 16-19, and 22-25 are rejected under 35 U.S.C. 102(b) as allegedly anticipated by US 6,251,840 to Ward (“Ward”). Applicants respectfully disagree for at least the following reasons.

Ward fails to disclose each and every limitation of currently amended pending independent claims 1, 11, and 19, and therefore fails to anticipate those claims and those claims depending therefrom.

Claims 1, 11, and 19 are directed to a power transmitting fluid for use in a transmission having steel-on-steel contact, an additive composition suitable for such a power transmitting fluid, and a method of making such a power transmitting fluid. The power transmitting fluid comprises a major amount of a base oil consisting essentially of mineral oil, and at least one thiadiazole or derivative thereof present in an amount sufficient to provide a low pulley coefficient of friction ranging from about 0.0758 to about 0.090 for steel-on-steel contact as measured by a Van Doorne push-belt CVT dynamometer test. Ward is directed to a lubricating composition having improved antiwear and antifoaming properties. Improvement of the low pulley steel-on-steel coefficient of friction within a continuously variable transmission is not taught, suggested, or disclosed by Ward.

Further, in column 4, lines 16-18, Ward discloses synthetic poly-alpha-olefins as preferred base oils due to their stability against oxidation. Ward’s additive compositions are

optimized for addition to such synthetic base oils, and one of skill in the art would be taught away from the use of a natural mineral oil as a base oil, based upon the reading of Ward. For example, all of the examples presented in Ward include synthetic base oils, as in Table II in column 16. Accordingly, Ward is manifestly deficient in teaching, disclosing, or suggesting the compositions and methods defined in currently amended pending independent claims 1, 11, and 19 and their dependent claims.

New claims 26-28 are likewise novel over Ward. Nothing in Ward teaches, discloses, or suggests a method for achieving a low pulley coefficient of friction ranging from about 0.0758 to about 0.090 for steel-on-steel contact as measured by a Van Doorne push-belt CVT dynamometer test with a lubricating oil comprising the components presently claimed. Likewise, nothing in Ward teaches, discloses, or suggests a method for lubricating a gear or transmission comprising contacting the gear or transmission with a lubricant composition comprising the components presently claimed. Consideration and allowance of new claims 26-28 is hereby respectfully requested.

### **REJECTIONS UNDER §103**

In the office action, claims 1, 4, 5, 7, 9-11, 13, 14, 16-19, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,251,840 to Ward ("Ward") in view of US 5,853,435 to Avery ("Avery"). The differences between Ward and the present claims have already been discussed above. Avery discloses a lubricating composition comprised of products from nonyl thiol and 2,5-dimercapto-1,3,4-thiadiazole having a coefficient of friction measured as 0.11. However, Avery used a 4-ball wear test to determine the coefficient of friction and not a Van Doorne push-belt CVT dynamometer as required by the presently amended claims. The two tests are significantly different, and necessarily would produce non-identical results even when identical fluids are tested. Therefore, the coefficient of friction measured by Avery can not be considered as being within the range of coefficients of friction required by the present claims. Thus, it would not have been obvious for Ward to combine the same compositions to produce the same results as in the instant application, and no motivation may be found in either Ward or Avery for doing so. Accordingly, reconsideration and allowance of claims 1, 4, 5, 7, 9-11, 13,

**RESPONSE AFTER FINAL REJECTION**  
**EXPEDITED PROCEDURE – RULE 116**  
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14, 16-19, and 22-25 are hereby respectfully requested.

In the office action, claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of US 6,634,977 to Ooyama (“Ooyama”) or Ward in view of Avery and Ooyama. As previously discussed, Ward and Avery do not present subject matter that causes the subject matter of the present claims to become obvious to one of skill in the art. Ooyama is directed toward a mechanical improvement of a CVT. While Ooyama describes a toroidal CVT, nothing is taught, suggested, or disclosed regarding a composition or method for improving the low pulley coefficient of friction. The combination of the above mentioned references with Ooyama adds nothing further, in view of the arguments previously presented. The dependent claims 6 and 15 should be in a condition for allowance based on the arguments presented for the independent claims 1 and 11 that claims 6 and 15 depend from. Reconsideration and allowance of claims 6 and 15 are hereby respectfully requested.

**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

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FEES

Please charge Deposit Account No. 12-2355 in the amount of \$400 for the payment of two new independent claims. Further, if these calculations are incorrect, the Commissioner is hereby authorized to charge any deficiencies in fees or credit any overpayment associated with this communication to Deposit Account No. 12-2355. Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 12-2355.

Respectfully submitted,



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